Middle Fork Snoqualmie River Valley Invasive Weed Removal Project

Project Type: *Invasive weed removal*

Location: *Middle Fork Snoqualmie River Valley, WA*

Landowner: *US Forest Service (75%), Washington State (20%), and King County Parks (remaining)*

Cost: *$70,000 for first two years*

Habitat Goals: *Control invasive weeds in 110,000 acres*

Funding Status: *$27,000 was raised for the first year of this multi-year project. Partners are actively seeking funding for the second year of the project in the amount of $43,000 but no commitments have been secured as of this writing. The budget increase in the second year is due to the cost of replacing AmeriCorps staff.*

DESCRIPTION:

The Mountains to Sound Greenway Trust (MTSG) and Cascade Land Conservancy (CLC) are spearheading an effort to control invasive weeds in the entire Middle Fork Snoqualmie River Valley, an 110,000-acre watershed 30 miles east of Seattle. The valley is relatively free of invasives compared to the rest of King County and is 98% publicly owned, so with a coordinated community effort all serious infestations can be controlled before they rage out of control. Project partners survey the watershed for invasives, prioritize removal to ensure that limited resources are most effectively applied, and build a dedicated volunteer community that will adopt sites for long-term monitoring and stewardship. Community volunteers reflect business, outdoor recreational and environmental interests.

STATUS:

Scouring invasives from the Middle Fork will protect a regional treasure. It is one of the last remaining wild places in King County, with old-growth forests, Wild and Scenic class rivers, healthy populations of bear, elk and bobcat, and strong native trout runs.

CONTACT:

Mark Boyar, Cascade Land Conservancy
206-760-9041

PARTNERS:

Middle Fork Outdoor Recreation Coalition (MidFORC), The Mountains to Sound Greenway Trust, Cascade Land Conservancy, American Whitewater, The Mountaineers/Snoqualmie Foothills Branch, the United States Forest Service, King County Department of Natural Resources and Parks, King County Noxious Weed Board, Washington Department of Natural Resources, and others

NE 52nd Place Fish Passage Improvement

DESCRIPTION:
This project would replace a perched culvert that is a barrier to fish passage on upper Patterson Creek. The project takes place on NE 52nd Place. The existing culvert is a combination of 30 in. CMP and 42 in. concrete pipe. The replacement culvert would be a 6 ft. wide or greater 3-sided box culvert. The fill over the culvert is deep and the road is a sole access road. Both of those factors increase the construction cost for the project.

STATUS:
The project concept was evaluated in the 2005 Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is also a highly ranked project in the Patterson Creek Rapid Rural Reconnaissance report (2004). Prior to initiation of design work, the county should obtain a construction agreement from the property owner and road association.

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

Project Type: *Culvert replacement*

Location: *Near Redmond, WA*

Landowner: *Private*

Cost: *Design - $50,000*
Construction - $400,000

Habitat Goals: *One fish barrier removed*

Funding Status: *No funding has been allocated to date and no grant applications are pending.*

NE 67th Place Fish Passage Improvement

Project Type: *Culvert replacement*

Location: *Near Redmond, WA*

Landowner: *Private*

Cost: *Design - $50,000*
Construction - $100,000

Habitat Goals: *One fish barrier removed*

Funding Status: *No funding has been allocated to date and no grant applications are pending.*

DESCRIPTION:
This project would replace a perched culvert that is a barrier to fish passage on upper Patterson Creek. The project takes place on NE 67th Place. The existing culvert is a 30 in. CMP. The replacement culvert would be a 4 ft. wide or greater 3-sided box culvert. The stream frequently overwhelms the capacity of the culvert and overtops the road. The overflow appears to flow through a yard downstream of the road before rejoining the creek. Water quality impacts are likely significant when the creek flows across the unpaved road.

STATUS:
The project concept was evaluated in the 2005 Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is also a highly ranked project in the Patterson Creek Rapid Rural Reconnaissance report (2004).

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

Oxbow Farm Channel Enhancement

DESCRIPTION:
This project will enhance the connection channel between an oxbow pond and the Snoqualmie River to increase the oxbow's functionality as rearing habitat for Chinook and Coho salmon. While fish surveys have shown that the oxbow is used as winter rearing habitat for Coho, its abrupt disconnection from the river during late spring results in stranding of juvenile salmon unable to return to the river. The project will contour the channel, build a serious of rock weirs, install large woody debris and plant native vegetation along the banks.

STATUS:
The Snohomish River Basin Salmon Conservation Plan identifies the connection of off-channel habitats, including oxbows, as a priority action item and specifically identified this reach of the Snoqualmie. Because it is easily accessible and takes place on a highly visited farm, the project will serve as an excellent educational opportunity for a variety of people, including other private landowners who may be interested in participating in similar projects on their property.

CONTACT:
Larry Nussbaum, Stewardship Partners
206-292-9875

PARTNERS:
Agricultural Landowner, Local Organizations

Project Type: *Removal of fish blockage and habitat enhancement*

Location: *Near Duvall, WA*

Landowner: *Agricultural landowner*

Cost: *$46,000*

Habitat Goals: *Enhance connection channel between an off-channel oxbow pond and the Snoqualmie River.*

Funding Status: *Approximately $20,000 of in-kind support and match for cash design work has been identified.*

Raging River Kerriston Reach Restoration

Project Type: *Large woody debris placement/ riparian planting*

Location: *Near Cedar River Watershed*

Landowner: *Fruit Grower's Association*

Cost: *Design - $ 50,000 (est.)*
Construction - $150,000 (est.)

Habitat Goals: *1,300 feet of restored edge habitat and 6 acres of restored riparian habitat*

Funding Status: *There is no funding dedicated to this project at present and no pending grant applications.*

DESCRIPTION:

The Kerriston Reach is named after the timber company town that used to occupy the site. Presently the site is a roughly half mile reach of the Raging River which flows through a relatively low gradient, broad floodplain, offering opportunities for significant habitat complexity and productivity. The primary constraints in the reach are the lack of large woody debris and the absence of mature riparian vegetation. The proposal is to add roughness to the channel by placing large wood in the channel and floodplain and to plant native vegetation, primarily alder, cottonwood, cedar, and spruce.

STATUS:

The project concept was evaluated in the 2005 Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is recommended for feasibility and design work.

CONTACT:

Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

Raging River Preston Reach Restoration

DESCRIPTION:
In 1964, a levee was constructed along the Raging River, just downstream of the community of Preston. The levee disconnected the river from 7 acres of floodplain and confined it to a narrow, straight alignment. Prior to levee construction, the reach experienced frequent channel migration. Historic aerial photos show two distinct complex channel formations in 1937 and 1960. Since the 1960s, the channel has maintained a simple alignment. Specific impacts to aquatic habitat conditions include:

- Elimination of side channels, reducing spawning, rearing and refuge habitat
- Reduction in pool area, reducing rearing habitat
- Elimination of mature riparian vegetation, reducing LWD delivery, shading, and cover
- An increase in substrate particle size resulting in reduced spawning area.

This project will restore habitat by removing the levee. The county now owns the property surrounded by the levee and has removed all structures. Boulders will be placed at the fringe of the floodplain to protect the toe of the county road. The boulders are designed to provide roughness that will reduce the water velocity, preventing the river from scouring the slope. The resulting restoration of river processes will lead to the reestablishment of prime spawning and rearing habitat in the reach.

STATUS:
The project is currently in the design stage. King County anticipates that construction will begin in the summer of 2006.

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

Project Type: *Levee Removal*

Setback Location: *Near Preston, WA*

Landowner: *King County*

Cost: *Design - $280,000*
Construction - $500,000

Habitat Goals: *1,200 feet of restored edge habitat, 2 acres of restored off-channel habitat and 3 acres of riparian planting*

Funding Status: *The funding status for this project is good. The county has obtained grants for design totaling $156,000 and grants for construction totaling $240,000. King County anticipates an additional $120,000 in grant funding for construction by the end of the year.*

Ribary Creek Restoration

Project Type: *Creek Restoration*

Location: *North Bend*

Landowner: *City of North Bend and King County*

Cost: *$60,000*

Habitat Goals: *Restore 1.5 acres of riparian habitat, fence 1,000 ft. along the creek and install over 3,000 native trees, willow stakes and shrubs*

Funding Status: *Phase I funded and in design. Phase II in planning stage.*

DESCRIPTION:
This is Phase II of a project that seeks to restore over 1.5 acres of riparian habitat along Ribary Creek on Tollgate Farm, a publicly owned property. The farm is an important link in the regional open space lands and supports habitat for ten species of birds and mammals listed as federally threatened or as state populations of concern. A tributary to the South Fork of the Snoqualmie River, Ribary Creek has suffered significant degradation as a result of clearing, cattle access and the introduction of invasive vegetation. Restoration efforts include the removal of non-native plants, fencing of 1,000+ feet of the creek, and installation of over 3,000 native trees, shrubs and willow stakes while still allowing for continued use of the farm for grazing. The restored riparian buffer of 100 ft. or more will provide improved conditions for resident cutthroat and rainbow trout as well as other species. Restored conditions upstream will also help improve water quality conditions downstream for Chinook and Coho salmon in the Snoqualmie River.

STATUS:
Fencing and restoration of the creek addresses erosion and water quality concerns by significantly limiting cattle access to the creek throughout the winter.

CONTACT:
Larry Stockton, City of North Bend
425-888-5633 x 4112

PARTNERS:
A local farmer who leases the land, the Mountains to Sound Greenway Trust

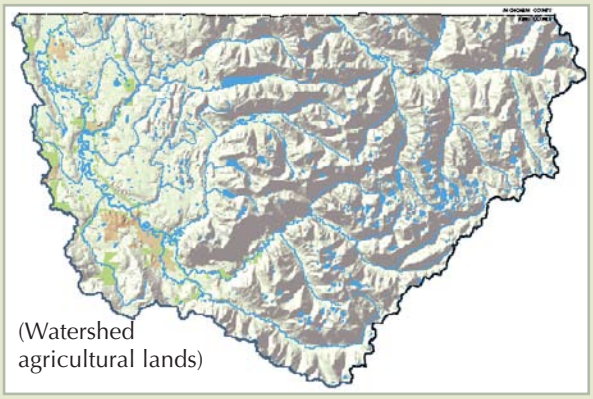
Salmon-Safe Certification and Marketing

DESCRIPTION:
Stewardship Partners has brought the Salmon–Safe certification program to Washington State as a market-based tool to promote fish friendly agriculture. The goal of this program is to support conservation and restoration efforts on working farms and encourage participation of private landowners in regional salmon recovery efforts. To become certified, farmers must meet a set of guidelines that include riparian and wetland protection, efficient use of irrigation water, erosion and sediment control, use of natural pest control methods, as well as enhancing biodiversity. Participating farmers are rewarded for their conservation efforts with marketing tools, media exposure and access to the growing market for environmentally friendly food products. This incentive based program successfully engages and recognizes farmers in salmon habitat conservation and restoration projects and serves as a statewide model. Stewardship Partners is identifying funding sources to improve practices as identified during the certification assessments.

STATUS:
Founded originally by the Pacific Rivers Council in 1996, the Salmon–Safe program has a successful track record in Oregon where over 100 farms have been certified. Partnering with the Portland based program, Stewardship Partners piloted Salmon–Safe in the Snoqualmie Valley in 2004. As of 2005, 22 farms in the Puget Sound region have been certified, with 8 in the Snoqualmie Valley.

CONTACT:
Larry Nussbaum, Stewardship Partners
206-292-9875

PARTNERS:
King Conservation District, Snoqualmie Watershed Forum


(Watershed agricultural lands)

Project Type: *Fish Friendly Farmland Certification*

Location: *Snoqualmie Valley and Puget Sound Region, WA*

Landowner: *Agricultural Landowners*

Cost: *$70,000 for the Puget Sound region ($25,000 for the Snoqualmie Valley)*

Habitat Goals: *Restore and conserve wildlife habitat and water quality on working agricultural lands*

Funding Status: *Stewardship Partners has secured $30,000 for this project with $13,000 allocated for the Snoqualmie.*

Sandy Cove Park Restoration

Project Type: *Riparian habitat restoration and riverbank bio-stabilization project*

Location: *Snoqualmie, WA*

Landowner: *City of Snoqualmie*

Cost: *$75,000*

Habitat Goals: *200 feet of restored riparian habitat*

Funding Status: *No funding has been secured at this time.*

DESCRIPTION:
The purpose of this project is to restore approximately 200-feet of riparian and floodplain habitat along a section of the upper Snoqualmie River. The site is located on public land owned and managed by the City and will serve as a demonstration project to citizens visiting the park, as well as to nearby residences and businesses. Existing riverbank conditions are unstable and continued erosion threatens wildlife habitat. Project partners will remove nonnative vegetation (blackberries), and plant willows and other native tree species to stabilize the bank over time and restore native shoreline vegetation. Students and community members will be involved in volunteer plantings, site maintenance and water quality monitoring.

STATUS:
The project has strong potential for improving habitat along a section of the upper Snoqualmie as well as for strengthening public awareness by engaging the local community in a highly visible restoration effort.

CONTACT:
Lauren Hollenbeck, City of Snoqualmie
425-888-5337

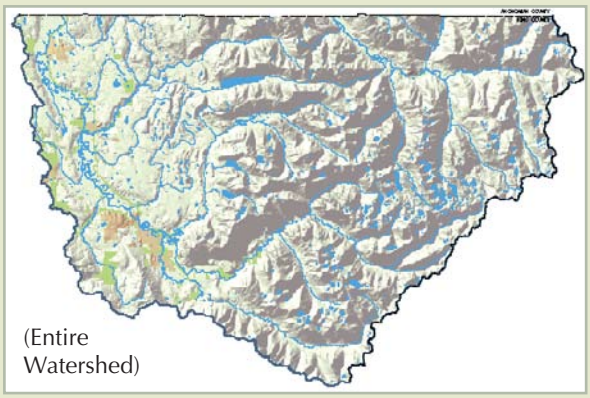
Shared Goats for Snoqualmie Salmon

DESCRIPTION:
The goal of this pilot project is to reduce noxious weed infestations on one acre of pasture and two acres of riparian habitat along the Snoqualmie River while assessing the effectiveness of using goat grazing as a weed control strategy. Goats will be used over a three-year period to control Japanese knotweed, Himalayan blackberries and thistle on three different properties. The partner farms will share goats as well as portable fencing and shelters. After three-years of weed management, the riparian areas will be revegetated with native plants. If successful, goat grazing would reduce and/or eliminate the need for herbicide use, develop on-going farm-salmon partnerships and help restore riparian and upland habitat.

STATUS:
Although using goats to remove brush is not a new concept, there have been few studies on the effectiveness of long-term goat use on weed removal and no programs which incorporate a cooperative livestock-share strategy among farmers to remove noxious weeds. This pilot project will encourage conservation and habitat restoration by providing a credible test and demonstration project.

CONTACT:
Jamie Glasgow, Washington Trout
360-866-4669

PARTNERS:
Three agricultural landowners



(Entire Watershed)

Project Type: *Invasive weed removal and native planting*

Location: *Three sites near Duvall, WA*

Landowner: *Agricultural Landowners*

Cost: *$398,568*

Habitat Goals: *Invasive weeds removed from 3 acres of riparian habitat*

Funding Status: *No funding for this project has been secured to date.*

Snoqualmie River Byers Riparian Restoration

Project Type: *Riparian restoration*

Location: *Near Carnation, WA*

Landowner: *Private*

Cost: *Design - $30,000*
Construction - $90,000

Habitat Goals*: 600 feet of restored edge habitat and 600 feet of riparian planting*

Funding Status: *No funding has been secured for this project to date. No grant applications are pending.*

DESCRIPTION:
The Byers property has 600 feet of riparian area in need of restoration planting. The concern with this project is that the bank is eroding fairly rapidly and large woody debris floats over the bank at high flows. Both of these factors could prevent the successful establishment of native tree species on site. We propose installing wood posts to capture the wood and begin to stabilize the bank against further erosion. Around the wood posts, we would plant native plants to restore habitat quality. The landowner has indicated a willingness to proceed with the project. The project also has the initial support of the agriculture program.

STATUS:
The project can probably go straight to design once funding has been secured.

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

Snoqualmie River Fall City Reach Reconnection

DESCRIPTION:
The site is located within King County's Fall City Natural Area on the right bank of the Snoqualmie River just downstream of Fall City. Historic aerial photos show that a large side channel used to exist in this area. The right bank is armored through the reach, but the facility does not prevent high flows from accessing the floodplain. The project would investigate whether off channel habitat in the floodplain could be effectively reconnected without impacting Neal Road, nearby residences, and important agricultural resources. The project site is located within a significant Chinook salmon spawning area in the Snoqualmie watershed, where off-channel habitat is particularly valuable.

STATUS:
The project concept was evaluated in the 2005 King County Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is recommended for feasibility and design work.

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

Project Type: *Off-channel habitat restoration*

Location: *Near Fall City, WA*

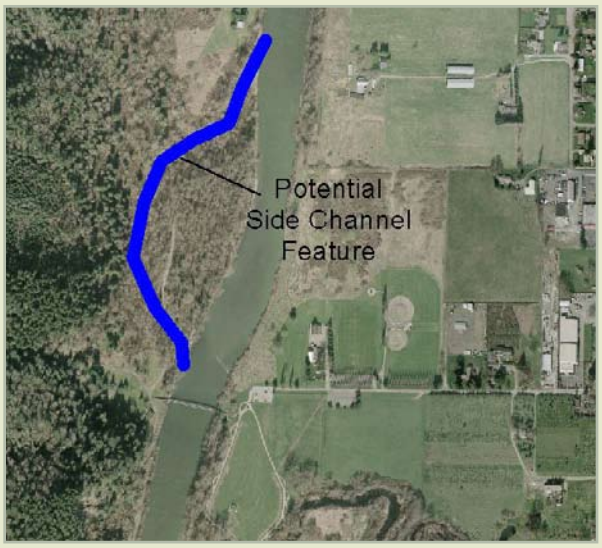
Landowner: *King County and Private*

Cost: *Design - $500,000 (est.)*
Construction - $2,000,000 (est.)

Habitat Goals: ,*5000 feet of restored edge habitat, 39 acres of restored off-channel habitat, and 12 acres of riparian planting*

Funding Status: *No funding has been secured for this project to date. No grant applications are pending.*

Snoqualmie River Footbridge Off Channel Reconnection



Project Type: *Off-channel habitat restoration*

Location: *Near Carnation, WA*

Landowner: *King County*

Cost: *Design - $100,000 (est.)*
Construction - $400,000 (est.)

Habitat Goals: *2,000 feet of restored edge habitat and 2 acres of restored off-channel habitat*

Funding Status: *No funding has been secured for this project to date. No grant applications are pending.*

DESCRIPTION:
The site is located within King County's Tolt McDonald Park on the left bank of the Snoqualmie River just downstream of the footbridge. Historic aerial photos show that a large side channel used to exist in this area. The left bank is armored through the reach, but the facility does not prevent high flows from accessing the floodplain. The project would investigate whether off channel habitat in the floodplain could be effectively reconnected without impacting use of the park. The project site is located near significant Chinook salmon spawning areas in the Snoqualmie watershed, where off-channel habitat is particularly valuable.

STATUS:
The project concept was evaluated in the 2005 King County Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is recommended for feasibility and design work.

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

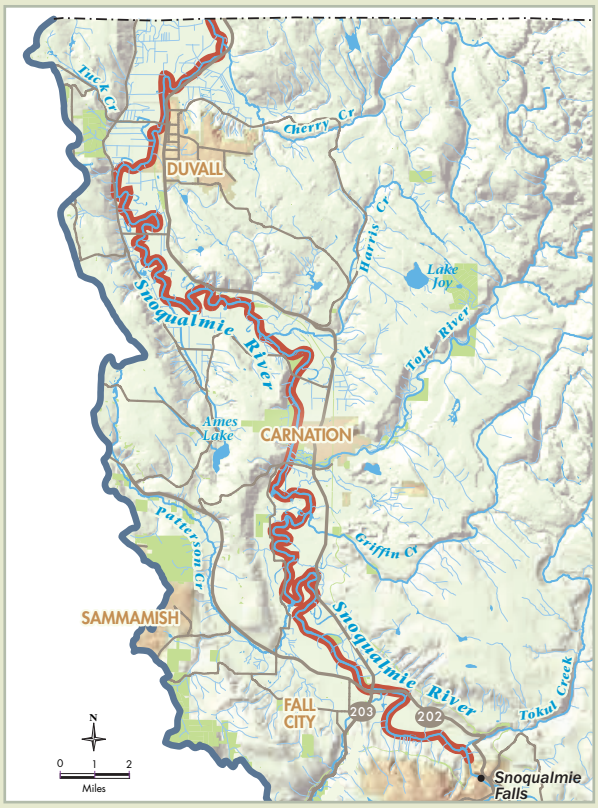
Snoqualmie River Riparian Restoration on Agricultural Lands

DESCRIPTION:
The Snohomish River Basin Salmon Conservation Plan prioritizes the reestablishment of a healthy riparian corridor along the Snoqualmie River. Eighty percent of mainstem shoreline is in private agricultural ownership, making habitat restoration gains on these lands a critical piece of recovery. Local agricultural interests are supportive of a voluntary planting effort and numerous landowners have agreed to participate in riparian plantings. This ongoing capital program is an important piece in reaching the goal of 125 acres of restored riparian habitat. King County has been working with a number of project partners to reach the 125 acre goal, including Stewardship Partners, the Snoqualmie Valley Tilth, and EarthCorps.

STATUS:
The county and partners have already begun work toward its goal of 125 acres by 2015. In 2004-2005, six acres were planted on six sites.

PARTNERS:
Agricultural Landowners, Stewardship Partners, Salmon-Safe, Snoqulamie Valley Tilth, Washington Trout, King Conservation District and Earth Corps.

CONTACT:
Claire Dyckman
Project Program Manager, King County
206-296-1926



Project Type: *Riparian restoration*

Location: *Snoqualmie River (RM 6–40)*

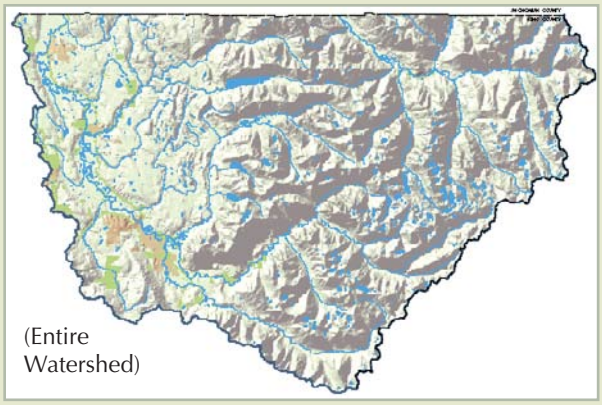
Landowner: *Various, many in agricultural production*

Cost: *Annually $50,000 - $100,000*

Habitat Goals: *50 acres of riparian planting*

Funding Status: *The county obtained grants from the King Conservation District in 2004 and 2005. We have been able to leverage the grant money with local King County funding and other grants. To continue serving interested landowners, we need continued annual funding.*

Snoqualmie Tribal Community Conservation Corps


(Entire Watershed)

Project Type: *Habitat conservation, restoration and community education*

Location: *Various locations in the watershed*

Landowner: *Private and public landowners*

Cost: *$175,267 for two years*

Habitat Goals: *Restore over 6 miles of riparian and in-stream habitat, and four off-channel wetland habitat sites*

Funding Status: *No funding has been secured for this project to date.*

DESCRIPTION:
The goal of this project is build a locally-based community conservation corps to carry out on-the-grounds conservation and restoration activities within the Snoqualmie Watershed while providing educational opportunities for Tribal and local youth and community members. The Snoqualmie Tribal Community Conservation Corps (STCCC) will select restoration projects consistent with Tribal and Forum priorities and which provide significant benefit to salmonid populations. Over the 2-year project period, the STCCC plans to service nine riparian and in-stream restoration, stewardship, and monitoring projects designed to restore over six stream miles and four off-channel wetland habitat sites. In addition, it will facilitate four community volunteer events, conduct ten educational training sessions, and install four bilingual (Lushootseed-English) interpretive signs throughout the Snoqualmie Watershed.

STATUS:
The Snoqualmie Tribe recognizes the need for a community-based conservation corps dedicated to the specific conservation needs of the Snoqualmie Watershed. As a community-based conservation corps, the STCCC fulfills salmon conservation plan priorities by 1) acting as an implementation tool to complete on-the-ground restoration projects and 2) contributing directly to cultural and community values and encouraging cooperation. The long-term vision of the STCCC is to establish a permanent and self-sustaining work group that meets the conservation and restoration project needs through independent and joint contracts while providing educational opportunities for Tribal and local youth and community members.

CONTACT:
Ian Kanair & Karen Suyama, Snoqualmie Tribe
425-333-6551

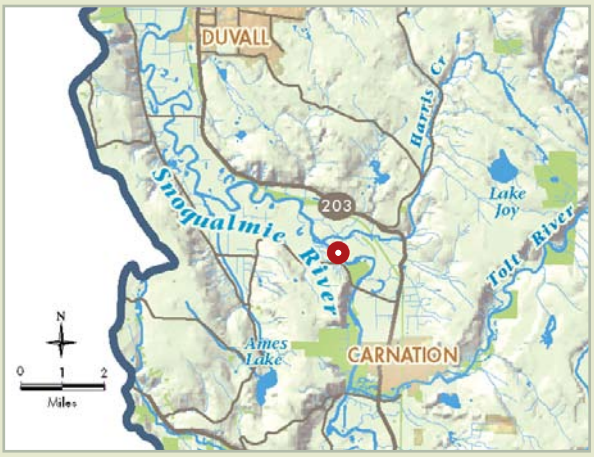
PARTNERS:
Private and agricultural landowners; tribal, county and municipal agencies; and local organizations.

Stillwater Habitat Restoration

DESCRIPTION:
The site is located along the right bank of the Snoqualmie River, about one mile downstream of the Carnation Farms Road bridge. The State Department of Fish and Wildlife owns 500 acres of floodplain along the river. This project would restore natural processes to a portion of the property. This will provide the system with the elements it needs to provide habitat conditions over a long period of time and through a range of climatic conditions (disturbance and quiescence). Project activities would include levee and revetment removals and riparian/floodplain plantings. The project requires considerable feasibility work, including consultation with the property owner to determine their level of support and collaboration on the project.

STATUS:
The project concept was evaluated in the 2005 Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is recommended for feasibility and design work.

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948



Project Type: *Levee removal/setback*

Location: *Near Carnation, WA*

Landowner: *State of Washington*

Cost: *Design - $250,000 (est.)*
Construction - $650,000 (est.)

Habitat Goals: *3,000 feet of restored edge habitat, 20 acres of restored off-channel habitat and 10 acres of riparian planting*

Funding Status: *No funding has been secured for this project to date.*

Stout Property Riparian Restoration

Project Type: *Riparian planting/edge restoration*

Location: *Near Carnation, WA*

Landowner: *Private*

Cost: *$100,000*

Habitat Goals: *2 acres of riparian planting*

Funding Status: *No funding has been allocated to date and no grant applications are pending.*

DESCRIPTION:

The Stout project is an opportunity to restore native plants to a section of the Snoqualmie River that has been cultivated or grazed to the water's edge. The property owner is very interested in planting a wide buffer that will provide habitat for fish and reduce flooding impacts on the property (by increasing the stability of the bank and by preventing debris carried by floodwaters from being deposited on the fields). The project also provides the county with an opportunity to develop its knowledge of riparian restoration techniques. One of the challenges to riparian restoration along the Snoqualmie River is the risk of significant bank erosion during the time period in which the plants are getting established. This site gives King County an opportunity to test its ability to determine which areas are at risk and possibly implement techniques to temporarily stabilize the planting area while the plants mature and develop their root system.

STATUS:

The project concept was evaluated in the 2005 Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is recommended for feasibility and design work.

CONTACT:

Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

Three Forks Natural Area Restoration

PROJECT DESCRIPTION:
Three Forks Natural Area (TFNA) comprises over 500 acres of publicly owned riparian lowlands that straddle the North, South and Middle Forks of the Snoqualmie River. The project area was the last major King County acquisition for TFNA and had been used for horse and cattle grazing. In particular, the South bank project area had been actively grazed until Fall 2005, at which time a livestock fence was installed and horses and cattle were no longer allowed to graze along the river.

This project is part of a multiphased effort to establish a healthy, viable riparian buffer along both banks of the Middle Fork. Funds are needed to purchase plants and perform some of the site prep.

Project outcomes include removal of non-native invasive vegetation, in particular blackberry and tansy ragwort, creation of a mixed deciduous and coniferous forest, erosion and flood protection, enhanced wildlife habitat, and recreational opportunities such as fishing, bird watching and wildlife viewing. The project area provides winter habitat for elk.

There will be a major emphasis to involve local schools, community groups and volunteers from the Upper Snoqualmie Valley in the stewardship of the project from start to finish.

STATUS:
Riparian restoration and recovery along the Middle Fork Snoqualmie River is important to watershed health and protection of water quality for downstream salmon species.

CONTACT:
David Kimmett, King County Parks
david.kimmett@metrokc.gov
206-510-5668

PARTNERS:
Two Rivers School

Project type: *Restoration and invasive removal along the Middle Fork Snoqualmie River*

Location: *The project is on approximately 40 acres of Three Forks Natural Area, east of North Bend along both banks of the Middle Fork Snoqualmie River.*

Landowner: *King County Department of Natural Resources and Parks*

Total Project Cost: *$50,000*

Habitat Goals: *35 acres of riparian planting*

Funding Status: *The North bank restoration has been partially completed through: King County's Small Habitat Restoration Program, King Conservation District grant, Mountains to Sound Greenway Trust in-kind donation, and a King County Rural Community Partnership grant through the Two Rivers School.*

Tolt River Natural Area Floodplain Reconnection

Project Type: *Levee removal/setback*

Location: *Near Carnation, WA*

Landowner: *King County and Private*

Cost: *Design - $300,000*
Construction - $1,000,000

Habitat Goals: *1.5 acres of restored off channel habitat*

Funding Status: *No funding has been secured for this project to date. No grant applications are pending.*

DESCRIPTION:
The Site Management Guidelines document for the Tolt Natural Area calls for the restoration of natural processes through the reach. One of the primary impediments to natural processes is the presence of a significant levee in the floodplain. This project will remove that structure and provide protection to the Tolt River Road. The result will be the reconnection of the river to an old floodplain channel, increasing the abundance and diversity of aquatic habitat in the reach. Prior to implementation of the project, the county must obtain permission/cooperation from three landowners potentially affected by the action.

STATUS:
The project concept was evaluated in the 2005 Snoqualmie Project Prioritization Process. The panel determined the project has the potential for high ecological benefit. It is recommended for feasibility and design work.

CONTACT:
Kirk Anderson
Snoqualmie Basin Steward, King County
206-296-1948

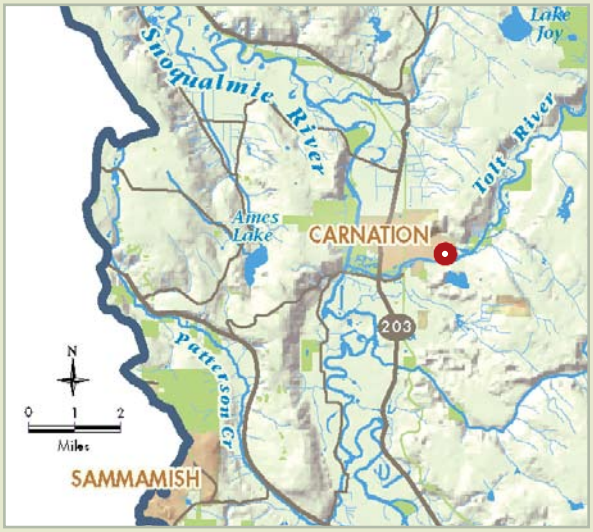
Tolt River Restoration

DESCRIPTION:
The City of Seattle recently identified and purchased six properties totaling 54 acres along the Tolt River in order to protect and restore salmonid habitat. Seattle City Light is developing a management plan for all of these properties with site-specific restoration goals. Efforts will likely include a combination of invasive removal and replanting with native vegetation.

STATUS:
The Salmon Plan recommends that governments take actions to protect and restore the river corridor and the natural processes that create and maintain habitat for aquatic species. This project serves to accelerate the regrowth of riparian forest so as to preserve in perpetuity habitat along the Tolt River corridor.

CONTACT:
Denise Krownbell, Seattle City Light
206-615-1127

PARTNERS:
National Fish and Wildlife Foundation



Project Type: *Riparian restoration*

Location: *Near Carnation, WA*

Landowner: *Seattle City Light*

Cost: *$109,125*

Habitat Goals: *54 acres of invasive plant removal and native planting*

Funding Status: *Funding was provided for land acquisition. Funds are now needed for restoration efforts.*

Wetlands Enhancement and Creation at Chinook Bend Natural Area

Project Type: *Wetlands enhancement and creation*

Location: *Chinook Bend Natural Area, Carnation, WA*

Landowner: *King County*

Cost: *$640,000 (including production equipment for reclaimed water)*

Habitat Goals: *Improve water quality in Snoqualmie River, restore and enhance 2 acres of wetlands*

Funding Status: *Project partners have obtained grants for approximately $140,000 for soils study, survey, and for partial design and construction.*

DESCRIPTION:

Over 80 percent of the wetlands that were historically located in the Snoqualmie Valley have been altered or removed. Using highly treated wastewater, this demonstration project will restore and enhance wetlands at the Chinook Bend Natural Area to benefit fish and wildlife habitat. Reclaimed water, produced at the Carnation wastewater treatment facility, will be piped to the wetlands where it will be naturally dispersed and eventually make its way to the Snoqualmie River through groundwater and surface water flows. The wetland complex will be planted with native species to optimize local wetland and riparian processes and functions for targeted species. The use of reclaimed water to restore and enhance wetlands at Chinook Bend will benefit many native aquatic and terrestrial plant and animal species that historically inhabited this area. An environmental education component will also be developed.

STATUS:

Now in its early stages, this demonstration project will improve water quality in the Snoqualmie River and fits into larger efforts to restore the watershed by restoring and enhancing wetlands. Once complete, it will serve as a model for other agencies faced with accommodating both rural growth and habitat conservation.

CONTACT:

Dan Golner, Ducks Unlimited
360-608-7799

PARTNERS:

King County, City of Carnation